

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for transferring messages in a distributed communication network, wherein the distributed communication network includes a message source coupled to a message destination by a plurality of message paths, each of the message paths including at least one overlay route processor coupled to the message source by at least one network path, the network path including intervening network components, the method comprising:

choosing a plurality of candidate overlay route processors;

ascertaining the identity of the intervening network components in the network paths between the message source and each of the plurality of candidate overlay route processors;

selecting a plurality of selected overlay route processors from the plurality of candidate overlay route processors based on minimizing the number of overlapping intervening network components in the network paths between the message source and the selected overlay route processors by analyzing the ascertained identities of the intervening network components; and

transferring a copy of a message from the message source to each of the selected overlay route processors along the network paths with a minimized number of overlapping intervening network components, wherein copies of the message from the message source are transferred to the selected overlay route processors in parallel.

2. (Original) The method of claim 1, further comprising during the selecting step, selecting a plurality of selected overlay route processors with zero overlapping intervening network components in the network paths between the message source and the selected overlay route processors.

3. (Original) The method of claim 1, wherein the choosing step includes choosing at least five candidate overlay route processors.

4. (Original) The method of claim 1, wherein the ascertaining step includes ascertaining the identity of intervening network components including intervening routers, intervening

switches and intervening firewalls.

5. (Original) The method of claim 1, wherein the selecting of a plurality of selected overlay route processors from the plurality of candidate overlay route processors is based initially on minimizing the number of overlapping intervening network components in the network paths between the message source and the selected overlay route processors and then based on minimizing the number of intervening network components.

6. (Original) The method of claim 1, wherein the selecting of a plurality of selected overlay route processors from the plurality of candidate overlay route processors is based initially on minimizing the number of overlapping intervening network components in the network paths between the message source and the selected overlay route processors and then based on maximizing the transmission speed between the message source and the selected overlay route processors.

7. (Original) The method of claim 1, wherein the ascertaining step includes ascertaining the IP-address identity of the intervening network components.

8. (Original) The method of claim 7, wherein the ascertaining step uses a series of User Datagram Protocol (UDP) packets.

9. (Original) The method of claim 7, wherein the ascertaining step uses a series of Internet Control Message Protocol (ICMP) packets.

10. (Original) The method of claim 1, further comprising during the transferring step, transferring a message from a connector message source.

11. (Currently Amended) A method for transferring messages in a distributed communication network, wherein the distributed communication network includes a connector message source coupled to a connector message destination by a plurality of message paths, each of the message paths including at least one overlay route processor coupled to the message source by at least one network path, the network path including intervening network components, the method comprising:

- choosing a plurality of candidate overlay route processors;

ascertaining the IP-address identity of the intervening network components in the network paths between the connector message source and each of the plurality of candidate overlay route processors;

selecting two selected overlay route processors from the plurality of candidate overlay route processors based on minimizing the number of overlapping intervening network components in the network paths between the connector message source and the two selected overlay route processors by analyzing the ascertained IP-address identities of the intervening network components; and

transferring a copy of a message from the connector message source to each of the two selected overlay route processors along the network paths with a minimized number of overlapping intervening network components, wherein copies of the message from the connector message source are transferred to the two selected overlay route processors in parallel.

12. (Currently Amended) The method of claim 11, further comprising during the selecting step, selecting two selected overlay route processors with zero overlapping intervening network components in the network paths between the connector message source and the two selected overlay route processors